Roundtable Dialogue with Durham Nuclear Health Committee on “Asking the Right Questions?”

DPRA Canada
Discussion Document 1: Asking the Right Questions? – What Canadians are Saying

The NWMO has committed to using a variety of methods to dialogue with Canadians in order to ensure that the study of nuclear waste management approaches reflects the values, concerns and expectations of Canadians at each step along the way.

A number of dialogue activities have been planned to learn from Canadians whether the elements they expect to be addressed in the study have been appropriately reflected and considered in Discussion Document 1. Reports on these activities will be posted on the NWMO website. Your comment is invited and appreciated.

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1. Participants

The following were in attendance at the dialogue session with the Durham Nuclear Health Committee:

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<tr>
<th>Name</th>
<th>Organization</th>
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<tr>
<td>Alex Heydon</td>
<td>Public Member, Ajax</td>
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<td>Dr. Barry Neil</td>
<td>Public Member, Ajax</td>
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<tr>
<td>Brian Devitt</td>
<td>Durham Region Health Department</td>
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<td>Dr. Gerry Gold</td>
<td>Public Member, Pickering</td>
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<td>Ken Shives</td>
<td>Public Member, Clarington</td>
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<td>Lorraine Weigel</td>
<td>Public Member, Clarington</td>
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<td>Mark Rohlehr</td>
<td>Public Member, Pickering</td>
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<td>Michael Nemeth</td>
<td>Public Member, Clarington</td>
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<td>Youssef Mroueh</td>
<td>Public Member, Pickering</td>
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2. Overview of Session

In January 2004 the NWMO had presented its first discussion document, Asking the Right Questions, to the DNHC and asked for response and feedback. The DNHC asked if this could be done through a facilitated session with the public members. It was agreed, and the session was held on Friday, April 2, 2004 at the OPG Public Information Centre, Pickering Nuclear Complex, Pickering, Ontario.

There were nine participants (the public members of the DNHC) as well as Donna Pawlowski representing the NWMO and the DPRA staff (Jim Micak (facilitator) and Rachelle Laurin (recorder). After introductions, the session began with a presentation by Jim Micak who introduced the agenda and the dialogue process.
The main presentation was given by Donna Pawlowski who provided a brief overview of the Nuclear Waste Management Organization, its mandate and recent activities. She then reviewed the content of Discussion Document #1 – Asking the Right Questions?, focusing on three areas:

1. The challenge/opportunity facing Canada regarding the long-term management of used nuclear fuel.
2. The range of possible technical methods.
3. The proposed analytical framework.

She described the various dialogue processes underway, and noted that by November 2005, the NWMO must provide a report with recommendations to the Federal government on a long-term approach for the management of Canada’s used nuclear fuel.

Following the presentation a question and answer session was held for clarification.

3. Asking The Right Questions?

The balance of the dialogue session focussed on a roundtable discussion in four areas:

1. The nature of the problem - has the problem been correctly described?
2. Terms and definitions - are the key terms and definitions regarding the technical methods and management approach clear, understandable and appropriate?
3. The alternative methods – is the characterization of technical methods appropriate, should other technical methods be considered in the study beyond the three required by legislation?
4. The analytical framework – does it capture the key issues? What changes should be considered?

Following is a summary of the main comments that were put forward by individuals as they reflected on these different discussion areas. No attempt was made to achieve a consensus or agreement on the various comments. Where agreement was evident, it is noted.

1) Has the Problem been Correctly Described?

There was general agreement among the participants that the NWMO has properly described the problem that needs to be addressed. In particular, participants felt that:

- Today’s generation needs to assume responsibility for the management of the wastes and establish an approach for long-term management.

- Sufficient funding needs to be provided today to ensure that the future costs of the management approach are fully covered. Money needs to be set aside and dedicated for the management of the wastes. Donna Pawlowski noted that the Nuclear Waste Fuel Act requires the nuclear energy corporations to set up and contribute annually to a trust fund to meet the future obligations for the management approach. Monies are now being deposited.

- The NWMO must clearly convey to the public not only the costs of the management approach but also the funding mechanism.

- Several participants felt that radiation hazard associated with the future management needs to be fully understood. Also, additional studies are necessary to confirm that interim storage is in fact safe. The NWMO documents assume that interim storage is safe, but this has not necessarily been proven.
• Regardless of the management approach, security needs to be a primary consideration. Security includes ensuring that the approach is safe from all perspectives, acts of terrorism, technology malfunction and effects of nature.

• As part of the definition of the problem, the NWMO needs to understand that public confidence and trust is extremely important. If the NWMO, through its studies and actions, does not establish trust and confidence, finding an acceptable management approach will become more difficult. The point was made that at the time of the construction of the nuclear power plants in Durham, the expectation was that disposal of the wastes would occur and that there would be no interim storage facilities at the reactor sites. Disposal has not happened and interim storage is likely for some time. This is not the way to build public trust.

• The description and presentation of risk needs to be carefully considered. Risk needs to be communicated in terms that are clear, understandable and relevant to the public.

• The NWMO needs to define what ‘long-term’ management means – is there a defined timeline or does it mean forever?

2) Key Terms and Definitions
• The participants were asked to consider five key terms and definitions presented in Discussion Document #1. The key terms are:
  − Technical Method
  − Disposal
  − Storage
  − Treatment
  − Management Approach

• The participants felt that the terms and definitions for disposal, storage and treatment as presented in Discussion Document #1 are complete and appropriate. No modifications were suggested.

Concerning the definition of the term management approach, the following modifications were suggested:
• Include security in the definition – its absence was considered to be important given recent terrorism events and the public’s expectation for safety.
• Clarify that the management approach can consist of several methods and the features associated with each technical method.

3) Basis for Determining Whether to Study Technical Methods
• The participants were asked to consider the range of technical methods presented in Discussion Document #1, specifically whether a rationale existed for the NWMO to study technical methods other than the three required to be studied by legislation (disposal, on-site storage, centralized storage). Comments were provided on two groups of methods.

  (1) Technical Methods of Limited Interest
  (2) Technical Methods Receiving International Attention
**Technical Methods of Limited Interest**

- Participants felt that the technical methods in this category should not be studied by the NWMO. The following reasons were provided:

  1. Most of the methods would be too costly to implement.
  2. The future is indeterminate, the selected management approach needs to be versatile – many of these technical methods lack versatility.
  3. Any technical method must be supported by valid scientific evidence. These methods have not been sufficiently studied, therefore there is little scientific evidence supporting them. The time required to properly study is not available.
  4. Any method that contravenes international law, treaties or conventions should not be considered. This eliminates all disposal at sea and in ice technical methods.
  5. Any method that closes the door on retrieving wastes for possible future use/treatment should not be considered. Also, disposal options should retain the flexibility of future retrieval.

**Technical Methods Receiving International Attention**

- Participants felt that the same rationale cited for methods of limited interest, apply equally to methods receiving international attention.

- Additional comments provided were:
  - Keep the door open for methods that allow for retrieval of the material. As technological advancements occur in time, methods such as treatment and re-processing should be revisited based on new information. It was noted that re-processing and transmutation are likely to be too expensive and complicated to be feasible today.
  - Canada should consider the merits of using international repositories, but it was recognized that this method might be politically/socially unacceptable.
  - NWMO has the benefit of time. Storage of the material means that a final decision is not required for many years. This keeps open the option for retrieval of material and possible future use or future treatment.
  - Disposal in geologic settings rather than storage at reactor sites should be considered. This need not be final disposal. Keep open the option of retrieving waste material.

**4) The Analytical Framework**

- Participants were asked to consider the proposed NWMO Analytical Framework as a whole and, by considering each of the 10 key questions.
General
- The Analytical Framework was viewed as being mostly complete. It was suggested that perhaps an eleventh Key Question be added – Education, Awareness and Communication. In particular, this key question could include aspects and considerations dealing with risk communications, public safety and reporting on activities. The risk communication should be presented in clear terms and easy to understand.

Institutions and Governance
- No significant comments were raised in this area.

Engagement and Participation in Decision-Making
- Add public involvement on “testing” the management approach – is it meeting the intended needs?
- Include a method to assess the change in public attitude over time

Aboriginal Values
- It was not clear why these values were specified as Aboriginal – these are values that are held by all or many Canadians.
- Identification of Aboriginal Values may suggest that the outcome will be disposal on or near Aboriginal lands – this may be misleading.
- Implies that one segment of the population may have a veto.

Ethical Considerations
- Need to also consider ethics from a historical perspective, especially, if developing future scenarios.
- Ensure that ethics guide the development and implementation of the process not just the outcome.
- State that this generation will provide the funding for the management approach – do not leave a financial burden for the future.

Synthesis and Continuous Learning
- Change periodic “assessment” to periodic “evaluation” – evaluation more clearly implies the potential to take a different direction if new information suggests a new direction makes sense.

Human Health, Safety and Well-Being
- It would be helpful for NWMO to define how it will determine an acceptable risk.
- Need to clarify and describe in terms that people will understand what is meant by “equity” reporting.

Security
- Change the emphasis in the presentation of considerations from “reducing access” to “secured” facilities – latter is more definitive and pro-active.
- Don’t restrict security considerations by definition of acts; emphasize the security of the methods and approach.

Environmental Integrity
- Need to define what an acceptable risk and who determines acceptability.
Economic Viability
- Sufficient funding needs to be provided today to ensure that the future costs of the management approach are fully covered. Money needs to be set aside and dedicated for the management of the wastes.
- The NWMO must clearly convey to the public not only the costs of the management approach but also the funding mechanism.

Technical Adequacy
- Use of the word adequacy suggests meeting a minimum and not maximizing – this does not build confidence.
- Preference expressed to redefine as being consistent with “best available scientific evidence” – this wording suggests a higher standard is to be met.

Summary – Final Comments
- The participants felt that NWMO has done a good job of Asking the Right Questions. In fact, in response to the title of the document, the NWMO was indeed ‘asking the right questions’
- Modifications and enhancement as suggested will help improve the NWMO discussion document.
- The Durham Nuclear Health Committee indicated that it would like future opportunities to provide comment on the NWMO work, as it progresses.

Status of Notes
These are the final summary notes and are not intended to represent a verbatim transcript.